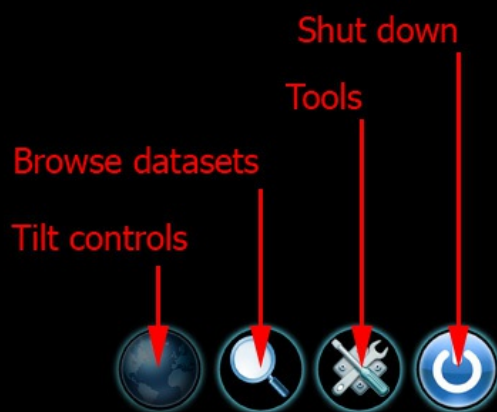# SOS Explorer Lite Help Guide
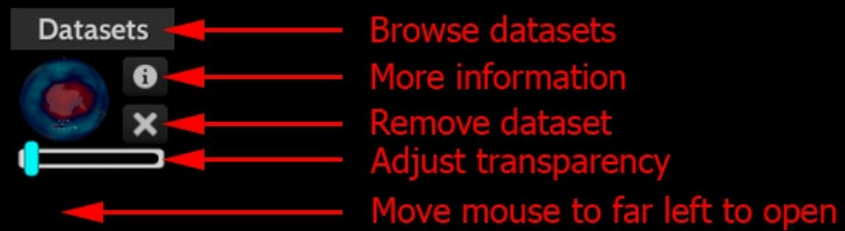
Table of Contents

Introduction

SOS Explorer Lite™ uses the NOAA-developed Terraviz™ visualization engine to create an interactive Earth for a flat screen display including those projected on walls, computers, and large displays, providing teachers, students, and the public access to a library of selected Science On a Sphere® datasets and movies. The visualizations show information provided by satellites, ground observations and computer models and rapidly animate through real-time global data. In addition, tools included in the application allow users to zoom into, probe, and graph the data, as well as add supplementary material including websites, videos, pictures, and placemarks. In order to make the product more accessible for teachers, lesson plans and pre-programmed tours through standards-relevant topics are provided here.

SOS Explorer Lite™ was developed by the Exploratory Visualization and Outreach (EVO) section of NOAA's Global Systems Division, which is also the home of Science On a Sphere (SOS, learn more at sos.noaa.gov). Wanting to build off of the success of SOS and expand the reach of SOS into classrooms and homes, developers created a flat screen version of SOS called SOS Explorer Lite™ (SOSx) . This introductory version of SOSx is freely available and allows users to explore a select group of SOS datasets and walk through three pre-programmed educational tours on a personal computer display or projector screen
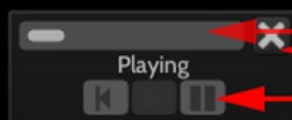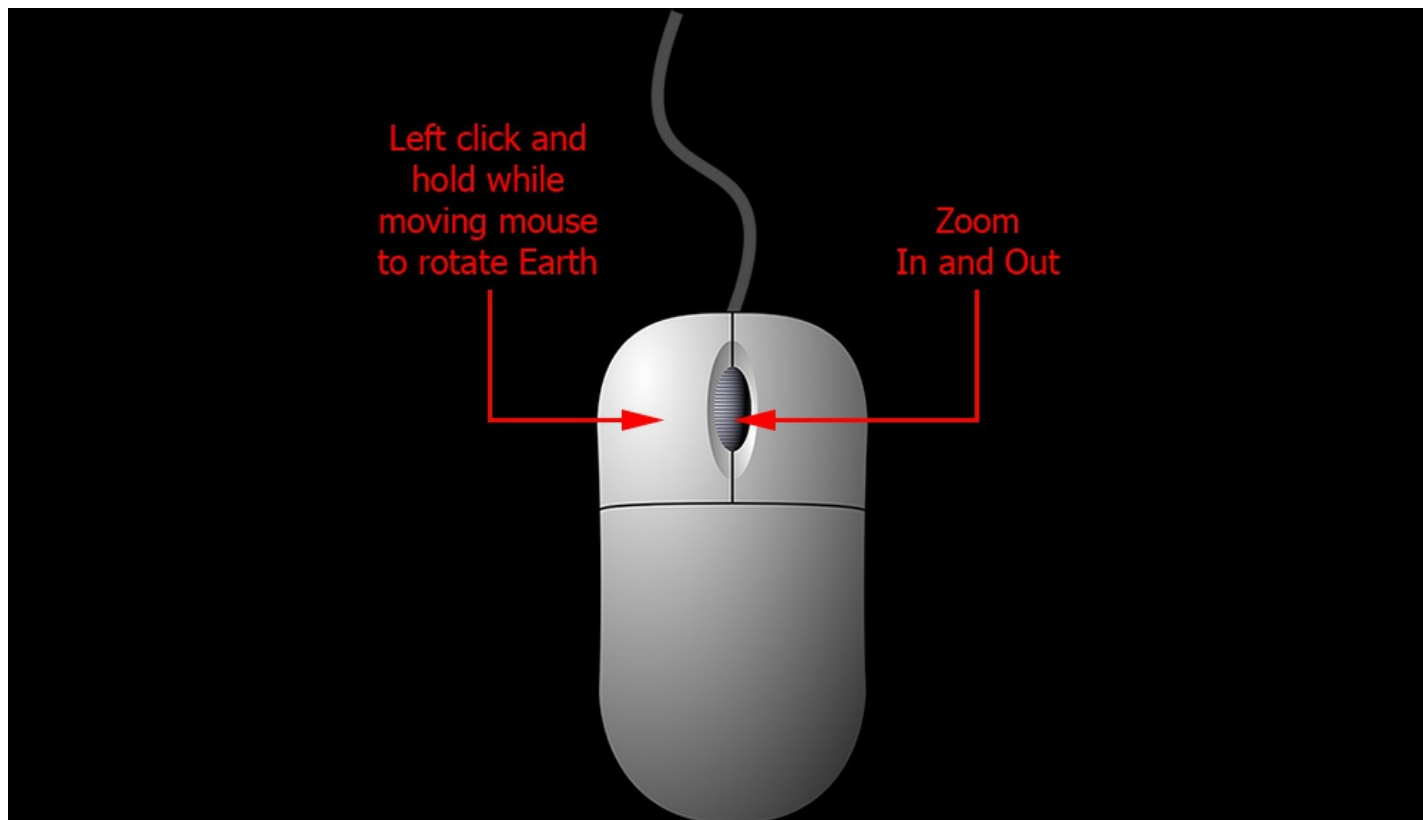
Controls and Interface

1.
2.
3.
4.
5.
6.

Datasets — Browse datasets
More information
Remove dataset
Adjust transparency
Move mouse to far left to open

Stratospheric Ozone — Dataset name
Altitude: 5000 mi — Cursor location
NOAA's Science On a Sphere Explorer(TM)

Preprogrammed tours

Progress indicator
Close tour
Playing
Tour controls

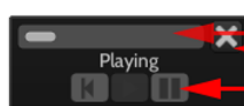Left click and
hold while
moving mouse
to rotate Earth

Zoom
In and Out

Tours

Tours are designed to walk you through how to present on a topic using SOS Explorer – they can include datasets, text, questions, pictures, audio, and webpages. Start a tour by selecting one of the icons in the lower left corner of the application.
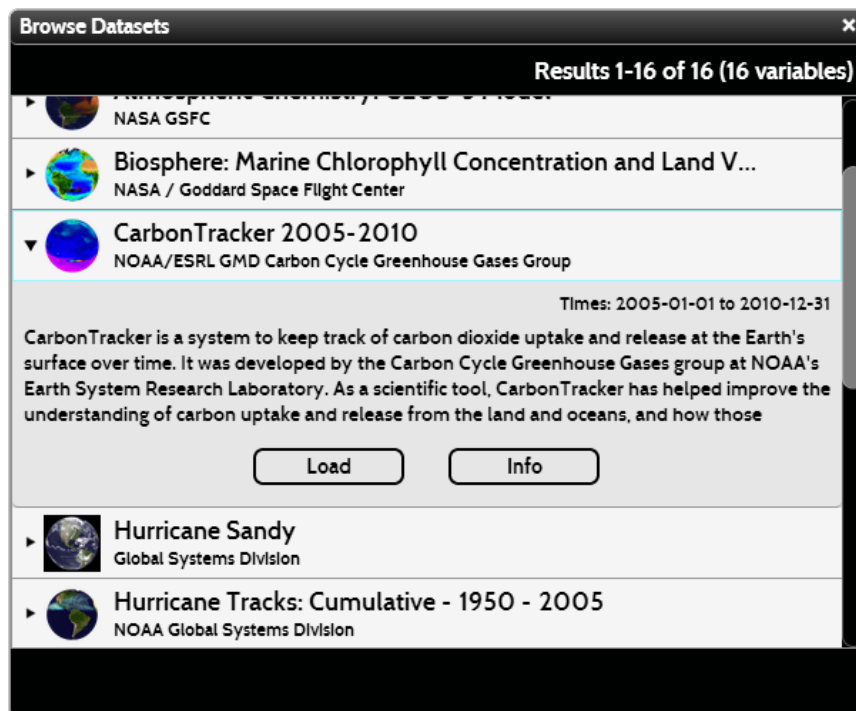

Preprogrammed tours

Progress indicator
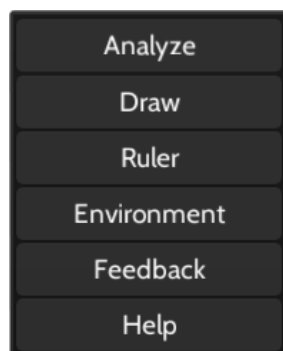Close tour
Tour controls

Browse Datasets

1. Click the dataset for a brief synopsis.
2. Click "Load" to load.
3. Click "Info" to find out more information from SOS website (with an internet connection).
4. Time period of the animation is listed in upper right.
5. Datasets are in alphabetical order.
6. Look for the data loaded in the hidden drawer on the left of your screen.
7. To reopen the Legend, click on the dataset icon at the top of the hidden drawer.

Loading a dataset

Tools

SOS Explorer Lite offers several tools to further explore its datasets.

Analysis

Move mouse over world to see data values (when applicable).

Right click on world then drag mouse to create a new transect.

Right-click on world to begin a polygon that calculates the average data value.

Draw

Choose circle, freehand or straight line, change color and line thickness if desired. Click done when finished. Double-click the line or icon to delete or add information to your drawing.

Double-click the line to delete or add information to your drawing.

Left click and move the mouse to generate a line segment.

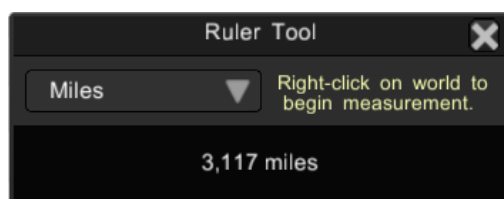Left click and hold while moving the mouse to create freehand drawings.
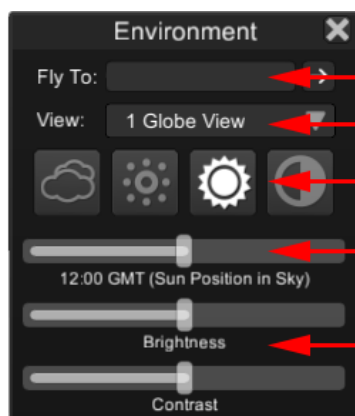
Left click and drag to create circles.

Click icons and drag symbols out onto the Earth.

Ruler

Right click on the world move the mouse to a new location and right click again to see the distance between the two points.

Environment

Enter a place to fly to that location

Select 1 or 2 globes, or a flat map view

Show/hide clouds, stars, sun, or lighting

Change the location of the sun

Monitor brighness/contrast controls

Feedback

Please consider providing your feedback so we can improve your experience.

Shutdown

Clicking this button will shut down SOS Explorer Lite.

More Information

More information can be found at /SOS_Explorer.